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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,765	09/15/2003	Steve Leslie Pope	1417-229	7270

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EXAMINER	
GOODCHILD, WILLIAM J	

ART UNIT	PAPER NUMBER
2145	

NOTIFICATION DATE	DELIVERY MODE
05/07/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary	Application No.	Applicant(s)	
	10/661,765	POPE ET AL.	
	Examiner	Art Unit	
	WILLIAM J. GOODCHILD	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17,39 and 40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17, 39-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-17 and 39-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Roberts et al., (hereinafter Roberts), (International Pub. No. WO 00/67131).

In reference to claim 1, Roberts teaches a method comprising:

support a first queue of data received over the link and addressed to a logical data port associated with a user application, (page 7, lines 18-19, page 2, lines 9-13 and page 8, lines 1-6);

support a second queue of data received over the link and identified as being directed to the operating system, (page 4, lines 12-18, page 7, lines 18-19 and page 8, lines 1-6); and

analyse data received over the link and identified as being directed to the operating system or the data port to determine whether that data meets one or more predefined criteria, and if it does meet the criteria transmit an interrupt to the operating system, (page 4, lines 12-18, page 2, line 21 – page 3, line 23 and page 6, lines 19-22).

In reference to claim 2, Roberts teaches the method of claim 1 wherein:

the user application has an address space and the first queue is located in that address space, (page 2, line 21 – page 3, line 5).

In reference to claim 3, Roberts teaches the method of claim 1 wherein:

the operating system has an address space and the second queue is located in that address space, (page 2, line 21 – page 3, line 5).

In reference to claim 4, Roberts teaches the method of claim 3 wherein:

the user application and the operating system have the same address space, (page 2, line 21 – page 3, line 23).

In reference to claim 5, Roberts teaches the method of claim 1 wherein:

the communication interface being arranged apply to the first queue data received over the link and identified as being directed to the data port, (page 3, lines 16-23).

In reference to claim 6, Roberts teaches the method of claim 1 wherein:

the communication interface being arranged apply to the second queue data received over the link and identified as being directed to the operating system, (page 3, lines 12-23).

In reference to claim 7, Roberts teaches the method of claim 1 wherein:

one of the predefined criteria is such that if the data received over the link matches one or more predetermined message forms then the communication interface will transmit an interrupt to the operating system, (page 4, lines 12-18).

In reference to claim 8, Roberts teaches the method of claim 1 wherein:

the communication interface is arranged to, if the data meets one or more of the predefined criteria and one or more additional criteria, transmit an interrupt to the operating system and transmit a message to the operating system indicating a port to which the data was addressed, (page 4, lines 12-18).

In reference to claim 9, Roberts teaches the method of claim 8 wherein:

the additional criteria are indicative of an error condition, (page 21, line 22 – page 22, line 2).

In reference to claim 10, Roberts teaches the method of claim 1 wherein:

the communication interface is arranged to support a third queue of data received over the link and addressed to a logical data port associated with a user application, and is arranged to apply to the first queue data units received over the link and of a form having a fixed length and to apply to the third queue data units received over the link and of a form having a variable length, (page 22, lines 3-17, page 2, line 21 – page 3, line 5).

In reference to claim 11, Roberts teaches the method of claim 10 wherein:

the data units of a fixed size include messages received over the link and interpreted by the communication interface as indicating an error status, (page 21, line 22 – page 22, line 2 and page 22, lines 12-17).

In reference to claim 12, Roberts teaches the method of claim 10 wherein:

the data units of a fixed size include messages received over the link and interpreted by the communication interface as indicating a request for or acknowledgement of set-up of a connection, (page 8, lines 16-29).

In reference to claim 13, Roberts teaches the method of claim 10 wherein:

the data units of a fixed size include messages received over the link and interpreted by the communication interface as indicating a data delivery event, (page 8, lines 16-29).

In reference to claim 14, Roberts teaches the method of claim 1 wherein:

the communication interface is arranged to analyse the content of each data unit received over the link and to determine in dependence on the content of that data unit which of the said queues to apply the data unit to, (page 4, line 25 – page 5, line 3).

In reference to claim 15, Roberts teaches the method of claim 1 wherein:

the communication interface is configurable by the operating system to set the said criteria, (page 2, line 21 – page 3, line 5 and page 5, lines 8-13).

In reference to claim 16, Roberts teaches the method of claim 1 wherein:

one or both of the communication interface and the operating system is responsive to a message of a predetermined type to return a message including information indicative of the status of the port, (page 8, lines 16-20 and 29).

In reference to claim 17, Roberts teaches the method of claim 16 wherein:

the data processor, the data processor being arranged to, when the processing of an application with which a data port is associated is suspended, set the criteria such that the communication interface will transmit an interrupt to the operating system on receiving data identified as being directed to that data port, (page 4, lines 12-18).

In reference to claim 39, Roberts teaches the method of claim 1 wherein:

A communication interface as claimed in claim 1, (page 4, lines 12-18, page 2, line 21 – page 3, line 23 and page 6, lines 19-22).

In reference to claim 40, Roberts teaches the method of claim 17 wherein:

A communication system as claimed in claim 17, (page 4, lines 12-18).

Response to Arguments

3. Applicant's arguments filed 01/24/2008 have been fully considered but they are not persuasive.

A - Applicant argues "Roberts fails to disclose a first queue of data received over the link and addressed to a logical data port associated with a user application and a second queue of data received over the link and identified as being directed to the operating system".

A – Roberts discloses a first queue of data [page 7, lines 18-19, creating a buffer for storing data], addressed to a logical data port associated with a user application [page 2, lines 9-13, computation can be done without the aid of the operating system, page 2, line 21 – page 3, line 5, page 3, 16-23 and figure 2, item 223], a second queue of data [page 4, lines 12-18] directed to the operating system [page 4, lines 12-18, an interrupt signal is generated].

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM J. GOODCHILD whose telephone number is (571)270-1589. The examiner can normally be reached on Monday - Friday / 8:00 AM - 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WJG
05/01/2008

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2145